



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T]**

**RIN 2120-AA64**

### **Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2C11 (Regional Jet Series 550) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, Model CL-600-2D24 (Regional Jet Series 900) airplanes, and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. This proposed AD was prompted by a determination that new and more restrictive airworthiness limitations are necessary. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new and more restrictive airworthiness limitations. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email [thd.crj@mhij.com](mailto:thd.crj@mhij.com); Internet <https://mhij.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

### **Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0679; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email [9-avs-nyacocos@faa.gov](mailto:9-avs-nyacocos@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email

9-avs-nyaco-cos@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

## **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2021-38, dated November 5, 2021 (TCCA AD CF-2021-38) (also referred to after this as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2C11 (Regional Jet Series 550) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, Model CL-600-2D24 (Regional Jet Series 900) airplanes, and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0679.

This proposed AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. In-service reports of emergency ram air valve (ERAV) part number (P/N) GG670-95019-1 stuck in closed or partially open positions have been received. Further investigation revealed the ERAV is failing due to corrosion on multiple sub-components, causing an increase in the breakaway torque that cannot be overcome by the valve actuator. Based on these findings, MHI RJ Aviation ULC issued CRJ700/900/1000 Series Regional Jet Temporary Revision (TR) ALI-0744, dated April 27, 2021, which reduced the interval for the existing Maintenance Review Board (MRB) Task 215000-201, Operational Check of the Ram Air Shutoff Valve; and CRJ700/900/1000 Series Regional Jet TR ALI-0745, dated April 27, 2021, which added new MRB Task 215000-204, Detailed Inspection of the Pack Discharge and Ram Air Supply Duct. The FAA is proposing this AD to address in-service reports of ERAV P/N GG670-95019-1 stuck in closed or partially open positions, which if not corrected, could

result in a complete loss of outside air supply, leading to an increase in flight deck and cabin temperatures and a possible increased level of contaminated air (carbon monoxide, carbon dioxide, or ozone). See the MCAI for additional background information.

### **Related Service Information under 1 CFR Part 51**

MHI RJ Aviation issued the following TRs, which describe airworthiness limitations for the air conditioning system.

- CRJ700/900/1000 Series Regional Jet TR ALI-0744, dated April 27, 2021, specifies a reduced interval for the operational check of the ram air shutoff valve.
- CRJ700/900/1000 Series Regional Jet TR ALI-0745, dated April 27, 2021, describes a new MRB task for inspecting the pack discharge and ram air supply duct.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed Requirements of this NPRM**

This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is

required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (i)(1) of this proposed AD.

### **Costs of Compliance**

The FAA estimates that this proposed AD affects 1,158 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

#### **MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):**

Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T.

**(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected Airworthiness Directives (ADs)**

None.

**(c) Applicability**

This AD applies to all MHI RJ Aviation ULC airplanes, certificated in any category, identified in paragraphs (c)(1) through (5) of this AD.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes.

(2) Model CL-600-2C11 (Regional Jet Series 550) airplanes.

(3) Model CL-600-2D15 (Regional Jet Series 705) airplanes.

(4) Model CL-600-2D24 (Regional Jet Series 900) airplanes.

(5) Model CL-600-2E25 (Regional Jet Series 1000) airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 21, Air conditioning.

**(e) Reason**

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address in-service reports of emergency ram air valve part number GG670-95019-1 stuck in closed or partially open positions, which, if not corrected could result in a complete loss of outside air supply, leading to an increase in flight deck and cabin temperatures and a possible increased level of contaminated air (carbon monoxide, carbon dioxide, or ozone).

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.



**(g) Maintenance or Inspection Program Revision**

(1) Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in [MHI RJ] CRJ700/900/1000 Series Regional Jet Series Temporary Revision (TR) ALI-0744, dated April 27, 2021. The initial compliance time for doing the task is at the applicable time specified in paragraph (g)(1)(i) or (ii) of this AD, or within 90 days after the effective date of this AD, whichever occurs later.

(i) For airplanes that have accumulated less than 1,800 flight hours since the last operational check of the ram air shutoff valve was performed as specified in Maintenance Review Board (MRB) Task 215000-201, and for airplanes that have accumulated less than 1,800 flight hours from the date of issuance of the original airworthiness certificate or original export certificate of airworthiness: Within 3 months after the effective date of this AD, or before accumulating 1,800 total flight hours, whichever occurs later.

(ii) For airplanes that have accumulated 1,800 flight hours or more since the last operational check of the ram air shutoff valve was performed as specified in MRB Task 215000-201, and for airplanes that have accumulated 1,800 flight hours or more since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness and for which no operational check of the valve has been performed: Within 3 months after the effective date of this AD or before accumulating 3,000 total flight hours, whichever occurs first.

(2) Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in [MHI RJ] CRJ700/900/1000 Series Regional Jet Series TR ALI-0745, dated April 27, 2021. The initial compliance time for doing the task is at the applicable time specified in paragraph (g)(2)(i) or (ii) of this AD, or within 90 days after the effective date of this AD, whichever occurs later.

(i) For airplanes that have accumulated less than 17,600 flight hours since the last detailed inspection of the pack discharge and ram air supply ducts was performed as specified in MRB Task 215000-204, and for airplanes that have accumulated less than 17,600 flight hours since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness: Within 3 months after the effective date of this AD, or before accumulating 17,600 total flight hours, whichever occurs later.

(ii) For airplanes that have accumulated 17,600 flight hours or more since the last detailed inspection of the pack discharge and ram air supply ducts as specified in MRB Task 215000-204, and for airplanes that have accumulated 17,600 flight hours or more since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness, and for which no detailed inspection of the pack discharge and ram air supply ducts has been performed: Within 3 months after the effective date of this AD.

**(h) No Alternative Actions or Intervals**

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals, may be used unless the actions and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) of this AD.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600

Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or MHI RJ Aviation ULC's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2021-38, dated November 5, 2021, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0679.

(2) For more information about this AD, contact Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(3) For service information identified in this AD, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email [thd.crj@mhirj.com](mailto:thd.crj@mhirj.com); Internet <https://mhirj.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des

Moines, WA. For information on the availability of this material at the FAA, call  
206-231-3195.

Issued on June 10, 2022.

Christina Underwood, Acting Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2022-12934 Filed: 6/15/2022 8:45 am; Publication Date: 6/16/2022]